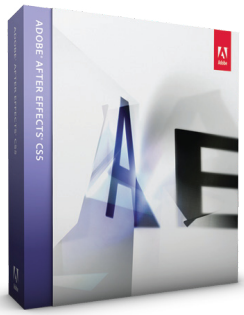
Adobe® After Effects® CS5.5

Transform moving images



Adobe After Effects CS5.5 is also available as a component of Adobe Creative Suite® 5.5 Production Premium and Adobe Creative Suite 5.5 Master Collection software.

Adobe Creative Suite 5.5 Production Premium combines full versions of:

- Adobe Premiere Pro® CS5.5
- Adobe After Effects CS5.5
- Adobe Photoshop® CS5 Extended
- Adobe Audition® CS5.5
- Adobe Flash Catalyst CS5.5
- Adobe Flash® Professional CS5.5
- Adobe Illustrator® CS5
- Adobe OnLocation™ CS5
- Adobe Encore® CS5

Additional components:

- Adobe Device Central CS5.5
- Adobe Bridge® CS5
- Adobe Media Encoder CS5.5

Special suite feature:

- Adobe Dynamic Link

Integrates with Adobe CS Live online services*†

Subscription option

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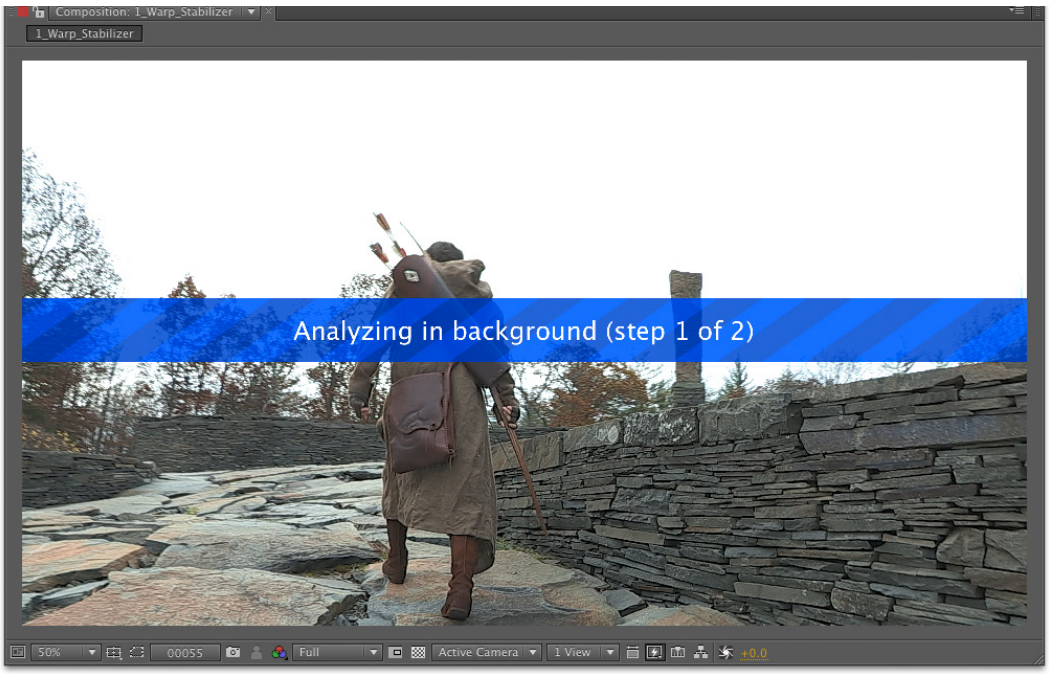
Deliver cinematic visual effects and sophisticated motion graphics with Adobe After Effects CS5.5 software, the industry-leading native 64-bit animation and compositing application, now with sophisticated stabilization, lens and lighting effects, and the most efficient performance ever.

After Effects CS5.5 delivers 64-bit performance that dramatically improves the experience of creating high resolution content. Streamlined tools and tight integration with other Creative Suite components accelerate your workflow, and an open-ended environment fosters creative experimentation. Realize your vision quickly and efficiently with a comprehensive set of tools designed to help you solve any creative challenge. Deliver your completed projects to a wide range of formats, from large-format feature films and high definition television to websites and mobile devices. After Effects CS5.5 adds the Warp Stabilizer, which raises the quality of handheld footage, and Camera Lens Blur, which faithfully recreates the look of a defocused camera lens, whether applied as an effect or with the After Effects 3D camera.

These new features add to a wide range of innovative 2D and 3D creation, compositing, and animation tools in After Effects. New timecode support takes the guesswork out of selecting source footage directly, and a stereoscopic 3D workflow speeds what is otherwise a tedious setup process. Take advantage of enhanced RED camera support added in the 10.0.1 upgrade of After Effects CS5 by working with Red Rocket cards and accessing RMD metadata. Import Cinema DNG files, and export comps as XDCAM EX files. Expanded color look-up-table (LUT) support helps you ensure accuracy across a variety of image-creation and delivery platforms.



Warp Stabilizer automatically smooths the motion of a handheld shot without creating keyframes. It offers easy-to-use controls to define the amount of stabiilization (and thus the amount of cropping) applied.

Top new features

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Who uses After Effects?

Motion graphics designers and visual effects artists use After Effects to produce intricately designed short-form content such as TV commercials, broadcast graphics, and film titles, and to create a wide range of visual effects shots. After Effects is able to handle virtually any animation and compositing task, and offers timesaving integration with other essential tools—Adobe Photoshop and Illustrator software, the video editing software Adobe Premiere Pro, and 3D modeling applications such as Maxon CINEMA 4D and Autodesk Maya. A rich ecosystem of third-party plug-ins means highly specialized solutions are readily available.

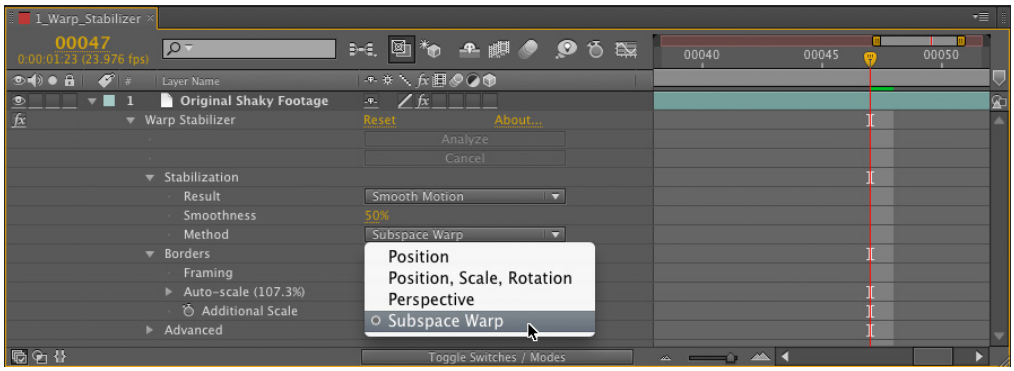
Video editors and other post-production professionals use After Effects to complement nonlinear editing tools such as Adobe Premiere Pro because it offers an efficient, well-integrated solution for delivering higher production values. When designing attention-getting show openers, lower thirds, and other types of motion graphics, After Effects offers timesaving presets and templates as well as the ability to refine virtually every aspect of every design element. Video editors also use After Effects for a wide variety of post-production tasks, including color correction, motion tracking and stabilization, and keying and rotoscoping.

Interactive designers turn to After Effects because it offers flexible tools they can use to prepare dynamic media that integrates well with interactive projects and the tools used to create them. Whether they're creating videos with transparent backgrounds that can be composited with other elements in real time in Flash® Player, designing snippets of persistent motion that add richness to an interactive experience, or creating visually distinctive text animations, interactive designers benefit from tight integration between After Effects and Adobe Flash Professional software.

Top new features of Adobe After Effects CS5.5

Smooth a camera move with Warp Stabilizer

Handheld footage is often shaky, with distracting motion artifacts, and it's simply not practical to use a counter-balanced camera rig or keep a dolly or crane ready for every moving shot. Warp Stabilizer provides an innovative solution that makes hand-held footage look as if it had been shot with a complicated, expensive camera rig. It can even use pixel analysis to resolve artifacts related to motion and parallax. You can't stabilize a shot without scaling somewhat to compensate for missing areas of frame, but this new approach requires less zooming than most available alternatives. You can use Warp Stabilizer either to smooth the existing motion of a camera while preserving the movement, or to create a locked-off shot, with no camera movement whatsoever.



Warp Stabilizer offers you a good deal of control over the automated result without the need for any actual keyframes in the timeline. The Subspace Warp option, chosen by default, performs pixel analysis to correct for motion artifacts. This correction is necessary to complement the change in perspective that results from stabilization, which changes parallax within the shot.

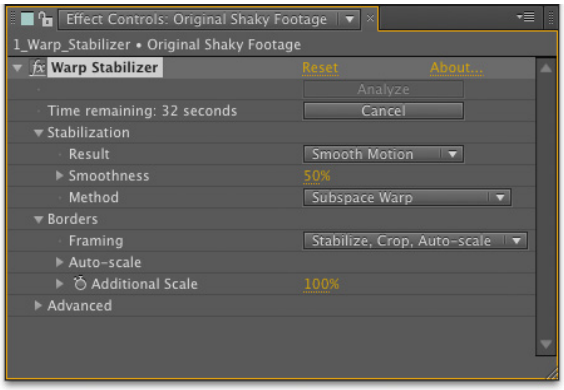
You can see a preliminary result in just one step: Apply Warp Stabilizer to the source layer, and let After Effects perform analysis and stabilization. Analysis begins automatically without the need to set tracking points or make any decisions whatsoever. Stabilization progress is displayed onscreen in a two-step process, first analyzing and then stabilizing; once the second step is complete, the result is ready for immediate review.

But Warp Stabilizer doesn't just smooth the motion of the camera. It also will remove motion artifacts that otherwise remain after stabilization. Warp Stabilizer processes individual areas of the frame separately to compensate for parallax. If these corrections are not desired, other modes can be used to stabilize only perspective, or scale and rotation, or even just position.

What is parallax?

Parallax is the phenomenon which causes objects closer to a camera to move more, relative to the frame, than do items further away. It can also lead objects in frame to move in opposite directions; for example, if the camera revolves around a mid-ground subject, the foreground and background will move in opposite directions.

The Warp Stabilizer effect offers further refinements as well. You can raise or lower the default amount of smoothness, which has a direct effect on the amount of automatic scaling. In the advanced controls, you can control whether to create a smoother shot with more cropping, or reduce the amount of both cropping and scaling by reducing the overall degree of smoothing.



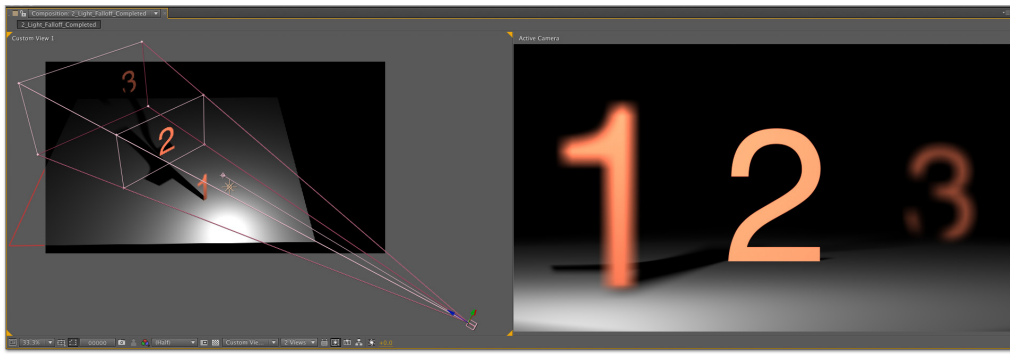
Warp Stabilizer displays progress (during analysis) and then control over the result.

You also have control over image behavior at the borders. In some cases, reducing the amount of cropping and scaling will reveal blank space at the edges of the frame where there is no image data. When you choose the method called Stabilize And Synthesize Edges, the borders automatically are filled in using information from adjacent frames. In other cases you may prefer to crop without scaling or just to stabilize, leaving the gaps at the edge of frame in place.

Create soft-focus effects with Camera Lens Blur

Camera lens blur re-creates in post-production the (often beautiful, even fascinating) abstract characteristics that appear in the defocused areas of a camera image. With this effect, footage shot in perfect focus can take on the elegant attributes of a soft focus image. This realistic blur can be applied with the new Camera Lens Blur effect or generated automatically via Depth Of Field controls in the After Effects camera.

In soft focus areas, Camera Lens Blur creates edge halos in the shape of the iris blades, just as a real, defocused camera lens does. The iris shape (from triangle up to decagon, representing the number of blades in the camera iris) determines the shape of a halo. Alongside this control are a number of other options to specify the exact characteristics of the iris.



Enabling depth-of-field blur with the After Effects camera activates camera blur controls, including Iris Shape. The amount of blur is determined by the focus distance and aperture settings.

You can also create *bokeh* effects when overbright highlights are present in 32 bpc mode. These occur in After Effects when you raise the intensity of 3D lights, or even more simply when you change the highlight gain, threshold, and saturation controls. These are useful to create realistic highlights, should you be working with source material without true over-range values.

What is bokeh?

Bokeh is a term originally coined in Japan for the qualities of defocused light areas as seen through a lens. Points of light become *circles of confusion*—bright disks that take on the shape of the camera iris—as seen in many cinematic night shots. Although occasionally regarded as a flaw, bokeh more often is viewed as a lovely and dvesirable way to introduce visual interest using shallow depth of field.

If you use the After Effects camera depth-of-field settings with 3D layers, then the Depth of Field, Focus Distance, and Aperture settings work together just as in previous versions to allow full control over rack focus effects in actual 3D space. New options in the Camera section of the Layer menu allow you to link the Point Of Interest and Zoom Distance, to focus on a selected layer, or even to follow focus on an animated layer. The result of these changes is that the behavior—and therefore, the look—of shallow depth of field from the After Effects camera now more closely resembles those produced by a real camera.

With the Camera Lens Blur effect, a separate layer can serve as a map to create depth-of-field effects in a 2D scene. The effect can also be used without a map to defocus the entire scene equally. You can create rack focus effects by adjusting the focal distance setting, converting

whichever channel values you specify to grayscale values that correspond to depth. The white areas of the map are fully blurred, the black areas not at all, while any gray areas transition between the two extremes.

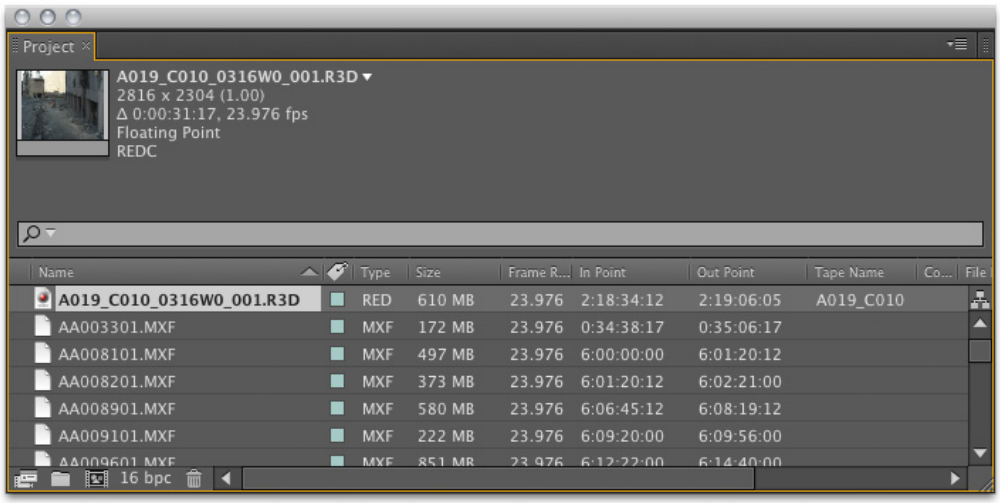
Bokeh blur is the natural result when highlights appear in the defocused area of an image, but it is not a part of most blur operations. The depth-of-field effects on the right bring focus to the face by making the foreground appear defocused.

Take the guesswork out of edits with source timecode support

Timecode support saves steps when working directly with source footage. Without it, you are left to guess based on visual clues or frame counts how a video selection is edited, increasing the likelihood of extra steps and careless errors. Suppose that an editor wants you to check specific frames to evaluate how well the background can be color keyed. With timecode information, you can be confident you're reviewing the same images. Whereas previously you needed a nonlinear editor such as Adobe Premiere Pro to access timecode, you now can save time and avoid ambiguity by accessing this data directly in After Effects.

Timecode is embedded in source media when recorded and used to log takes when edited. Timecode hours, minutes, seconds, and frames settings are absolute and do not change, making it possible to determine exactly where a clip begins and ends. Most video formats, including QuickTime, AVI, Broadcast WAV, DPX, and some variations of MXF embed timecode data that can be read by After Effects. Timecode offsets can be recorded as XMP metadata.

Timecode data are automatically imported with eligible source files and appear in the Project panel. You can search for a clip using the source data. A set of clips can be sorted in chronological order, regardless of clip names or other attributes, just by clicking on the In Point column heading. When working with a large project, you can organize source clips by the reel on which they were shot; this information also appears directly in the Project panel.



After Effects can read embedded source timecode data, enabling more precision when working directly with source footage. If a tape name has been specified, it appears in the Project panel along with the in and out points of a source clip.

Expand your creative toolset

Open up creative possibilities as you tackle a broad spectrum of planning, production, and post-production tasks with Adobe Creative Suite 5.5 Production Premium.

Get more creative power at an appealing price. In addition to Adobe Premiere Pro, Encore, and OnLocation, CS5.5 Production Premium offers the latest versions of Adobe After Effects, Photoshop Extended, Flash Professional, Flash Catalyst, Audition, and Illustrator.

Move up to Production Premium to:

Create rich visual effects and sophisticated motion graphics. After Effects gives you everything you need to create opening titles, animated graphics, and visual effects, as well as to create and move images and video in 3D. Eliminate unwanted camera movement and compensate for optic irregularities caused by camera motion with Warp Stabilizer.

Enhance 3D for video. Create and enhance 3D and motion-based content and prepare still images and text for all your projects. Work fast with cross-platform 64-bit support, and create stunning HDR images for video backdrops.

Record, edit, mix, master, and sweeten audio. With Audition CS5.5—now available for Mac and Windows—enjoy a smooth workflow with a fast new audio playback engine, royalty-free content* (available through the Resource Central panel), and deep integration with Adobe Premiere Pro CS5.5.

Design interactive experiences. Create video portfolios and other engaging interactive media with easy-to-use Flash Catalyst or with the full power of Flash Professional.

For more information, see *Adobe Creative Suite 5.5 Production Premium What's New.*

The Timecode effect, which displays timecode graphically when applied to a clip, has also been updated to either read source timecode directly or to use values based on composition timing or whatever values you choose. This allows you not only to display accurate timecode in a composition containing a source clip, but also to use timecode as a customizable graphical element in compositions.

While you may still want to do the majority of your previewing and editing in applications designed for that purpose, having this capacity in After Effects gives you a sure-fire method to get the numbers right.

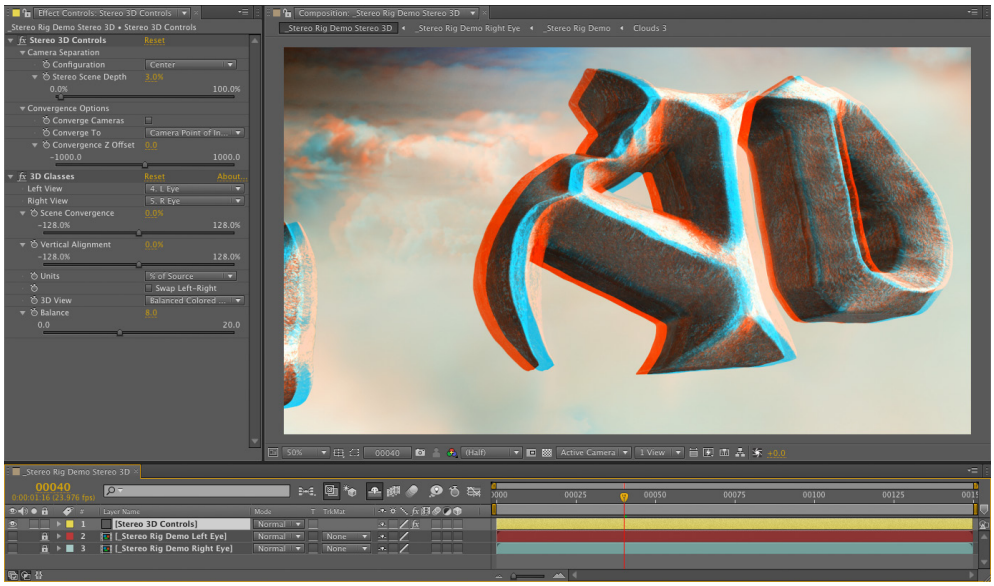
Easily establish a stereoscopic 3D workflow

After Effects CS5.5 makes it easier than before to set up a stereo-ready 3D image pipeline for review and output of stereo scenes that use the After Effects camera. Initial setup is nearly instantaneous. Start with a composition containing 3D elements, select the main camera (if one is present) and then simply choose Layer > Create Stereo 3D Rig. A right and a left camera are created flanking the master camera, and a set of nested compositions is established with a stereo 3D view containing left and right eye nested compositions, each of which contains the original source composition viewed with the appropriate camera.

The stereo 3D composition includes a control layer with two individual effects already applied, using customizable presets: Stereo 3D Controls and 3D Glasses. The Stereo 3D Controls effect allows you to center around any one of the three cameras and adjust the stereo depth by changing the distance between the left and right views (known as the "interaxial" or "interocular" distance). The cameras can remain parallel, or they can converge at the point of interest or zoom distance. This convergence point can then be offset with a slider control.

The stereo 3D preview itself is created with the 3D Glasses effect. Significantly enhanced in After Effects CS5.5, this effect includes controls to match the physical setup of source stereo footage. You can fine-tune convergence and vertical alignment (if actual physical cameras were misaligned). This effect produces the actual stereo image, allowing you to choose from one of nine 3D output configurations (interlaced, stereo pair, or various types of anaglyph), allowing you to don 3D glasses and preview directly in After Effects.

Because stereo 3D animations often use more than one point of view on the same source material, you can create multiple rigs to correspond to multiple cameras in a single composition. For final output, any changes you make in the master composition are passed through to the composition for each eye.

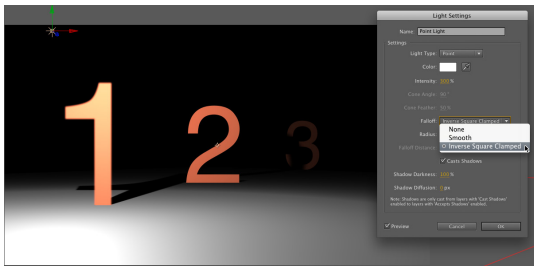


Although stereo 3D projects have been created in After Effects for some time, setup was never as quick and easy. A master composition to preview the stereo effect contains a sub-composition for each eye and a rigged source.

Control light intensity falloff

In the real world, light intensity diminishes naturally the further lit objects are from the light source. After Effects now gives you the controls you need to simulate natural illumination falloff in a 3D scene—or create other light intensity effects, if so desired.

Choose the Inverse Square Clamped falloff setting to recreate the real-world decay of light over distance, in which light intensity naturally falls off by the square of the inverse distance. The Smooth falloff setting allows you to define the exact distance over which light levels decay. With either setting, you can determine at what distance (in pixels) light falloff starts and ends.



Inverse-square lighting falls off naturally, displaying characteristics of real-world light.

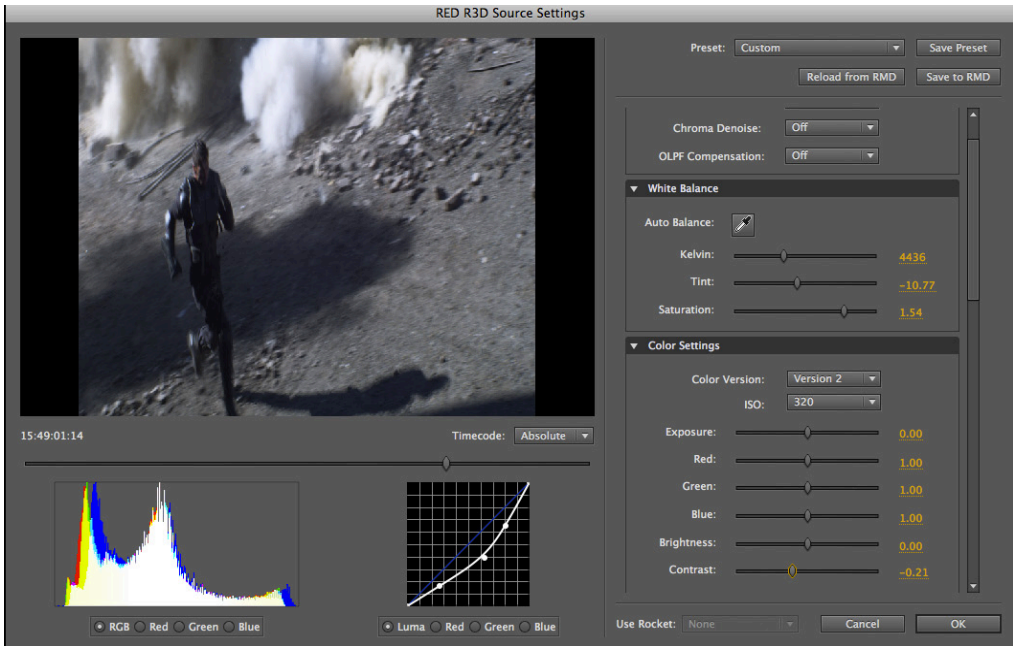
The same four basic choices of light type previously offered in After Effects—Parallel, Spot, Point, and Ambient—all remain, with each type (except Ambient, which is equal at all positions and thus does not decay) supporting both types of falloff. You can mix light types, intensities, and shadow casting settings the same way you could in previous releases of After Effects.

Work with more high-definition source formats

As new formats for gathering high definition footage arise, After Effects continues to add support for the most versatile and widely used among them, including native R3D support. The RED ROCKET card for Mac OS and Windows delivers real-time 4K RGB playback and transcoding of R3D files from the RED camera, and After Effects can import those files directly, reducing steps between shooting and post-production.

RED RMD files are sidecar files alongside the R3D file that contain information about how the shot is graded in software such as REDCINE-X. After Effects imports and applies these RMD settings on import, so that important decisions about how to interpret the color of the shot are not left behind.

In addition to the ability to save and load the latest versions of RMD—as well as your own custom presets— you can now pick a white point and use either a histogram or a five-point curves interface to adjust red, green, blue, RGB, or Luma values for a clip. You can choose which Color Version is used, and FLUTs, Lift, Gamma, and Gain settings are all supported.



Digital footage is often shot at low contrast, resulting in a color range that differs from the intended final look. Not only does After Effects include a full suite of RED tools and settings to adjust raw source on import, it also supports sidecar RMD files that contain these settings from other applications.

CinemaDNG enables film and video professionals working with RAW digital footage—such as a time-lapse sequence from a DSLR camera—to use an open standard. After Effects CS5.5 now imports CinemaDNG files, offering similar controls on import that apply to DNG files, a still format already in wide use. CinemaDNG helps ensure interoperability and the lasting viability of source footage files.

Work with additional LUTs

Color look-up table (LUT) support helps boost confidence that creative and technical decisions translate properly to final output in a wide variety of situations, and help ensure color consistency across multiple devices. After Effects CS5.5 expands LUT support beyond the popular 3DL and CUBE file formats to also allow the loading of 3DL files with floating point values or 3DMES/Mesh keywords, or those saved from the ASSIMILATE SCRATCH system.

A LUT makes it possible to save the color correction performed on a file using a wide range of applications and systems, and simulate those settings exactly within After Effects on a specific piece of footage or final composite. A LUT is also used to simulate how images look when projected via specific film stocks or digital projectors. LUTs are an important part of streamlining complex post-production pipelines that span many locations and use a wide variety of software and hardware.

Export XDCAM EX footage

After Effects can now render in the XDCAM EX format using multiple bit-rates, pixel aspects, and frame rates. This allows you to roundtrip footage shot on currently popular Sony cameras such as the PMW-EX3 so that your output is consistent with files being edited directly from source.

Collaborate easily with colleagues still using After Effects CS5

Expected ship date
Second quarter 2011

For more information
Product details:
www.adobe.com/aftereffects

Choosing when to upgrade to After Effects CS5.5 is simpler with backward compatibility of saved projects. The new option makes it possible to open a project created in version CS5.5 on a system that has not yet been upgraded from CS5.

This option allows you to upgrade your studio even if you anticipate working with clients and freelancers have not yet upgraded. Although After Effects CS5 users do not gain access to the many great features added in this latest version, effects available only in After Effects CS5.5 show up as placeholders, the same way that third-party plug-ins are handled when missing. When the project is reopened in After Effects CS5.5, those settings are restored.

Benefit from small changes that make a big difference

Each new release of After Effects includes many enhancements that aid workflow and add refinements to existing features, and version CS5.5 is no exception.

- **Improved disk caching** allows for more efficient rendering. Now enabled by default, with a 20 GB limit, many more frames are eligible for disk caching. Items are cached speculatively when the app is idle, so you don't have to wait for them to be added and purged. Caching frames at any time creates a more responsive work environment.
- **Search history** saves recent searches while allowing you to save favorite search terms with a shortcut. You can freely delete items from the 10 item list that is saved.
- **Drag-selection of layers in the Composition panel** improves the workflow. A marquee selection selects layers in the same way you might select mask vertices, holding Shift to add or subtract from the existing selection.
- **Create Orbit Nul**l parents the camera to a new null layer named to match that camera.
- **Perform OR searches** using commas. Add a comma between entries in a list of search terms, and After Effects will return any item that contains at least one of those text strings.
- **Dual time display in the Timeline panel** lets you monitor both the current time display, such as timecode, and the alternate display, such as frames, as well as the current frame rate.

mocha for After Effects CS5.5 (included: English UI only)

This latest version of the powerful plug-in from Imagineer Systems—first introduced in After Effects CS4—features a completely revamped and streamlined interface. With mocha for After Effects you can precisely track whole planes of motion and apply the results in an After Effects composition, greatly increasing your motion tracking, corner pinning and rotoscoping options.

System requirements

Mac OS

- Multicore Intel® processor with 64-bit support
- Mac OS X v10.5.8 or v10.6
- 2GB of RAM
- 4GB of available hard-disk space plus 2GB of space for optional content; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash storage devices)
- 1280x800 display with OpenGL 2.0–compatible graphics card
- DVD-ROM drive
- QuickTime 7.6.2 software required for QuickTime features
- Broadband Internet connection required for online services and to validate Subscription Edition (if applicable) on an ongoing basis*

Windows

- Intel® Pentium® 4 or AMD Athlon® 64 processor (Intel Core™ i3, i5, or i7 or or AMD Phenom® II recommended); 64-bit support required
- 64-bit operating system required: Microsoft® Windows Vista® Home Premium, Business, Ultimate, or Enterprise with Service Pack 1 or Windows® 7
- 2GB of RAM
- 3GB of available hard-disk space plus 2GB of space for optional content; additional free space required during installation (cannot install on removable flash storage devices)
- 1280x800 display with OpenGL 2.0–compatible graphics card
- DVD-ROM drive
- QuickTime 7.6.2 software required for QuickTime features
- Broadband Internet connection required for online services and to validate Subscription Edition (if applicable) on an ongoing basis*

For updates to system requirements and more detailed information about video hardware compatibility, visit *www.adobe.com/go/aftereffects_systemreqs*.

Still using After Effects CS4?

If you're still using After Effects CS4, upgrading to After Effects CS5.5 gives you the huge improvements in performance and efficiency first introduced in After Effects CS5. These features substantially boost productivity in many areas.

- **Native 64-bit support**—Get the most out of your hardware investment. As a native 64-bit application, After Effects uses all available RAM so that you can work efficiently on complex HD, 2K, and 4K projects. On average, using data from over 130 performance benchmarks, After Effects CS5 is more than twice as fast as After Effects CS4 (according to independent research firm Pfeiffer Consulting).
- **Roto Brush**—Isolate moving foreground elements from their backgrounds in a fraction of the time required by other methods. Quickly identify foreground and background elements, and then let the Roto Brush automatically create transparency for you. Refine edges easily for extremely precise results. Rotoscoping a five-second clip was found to be 20x faster with Roto Brush than using the After Effects CS4 workflow (Pfeiffer Consulting).
- **Color Finesse 3 LE** (English user interface only)—Enjoy an enhanced color correction workflow with Color Finesse 3 LE from Synthetic Aperture. Features include a vibrance control similar to that in Adobe Photoshop Lightroom® software, hue and saturation curve controls, 3D LUT export, and highlight recovery.
- **Refine Matte effect**—Apply intelligent edge tracking, dechattering, and motion blurring capabilities to any layer with a problematic alpha channel, such as keyed footage.
- **Digieffects FreeForm** (English user interface only)—Turn flat objects into virtually any 3D shape using this popular 3D mesh warp plug-in by Digieffects, now included with After Effects.

Still using After Effects CS3?

For those still using After Effects CS3, upgrading to After Effects CS5.5 also gives you the chance to catch up on all the great features added in After Effects CS4. These features greatly enhance your productivity, as well as provide ground-breaking integration with other Adobe software.

- **QuickSearch—**Instantly locate any element, or all used or missing footage in a comp or project.
- **Composition Navigator and Mini-Flowchart—**Navigate quickly between nested compositions with a simple keyboard shortcut and interactive user interface element.
- **Separate X, Y & Z values—**Set unique keyframes for properties with three dimensions, simplifying the process of creating natural motion.
- **Photoshop integration**—Place 3D objects on layers in Photoshop (including the new Repoussé layers introduced in Photoshop CS5), paint them using its industry-standard tools, import them into After Effects, and animate them alongside your other 3D layers.
- **Flash integration**—Export After Effects compositions as layered projects which can be imported into Flash Professional.

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Adobe Systems Incorporated
345 Park Avenue
San Jose, CA 95110-2704
USA
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†CS Live online services are complimentary for a limited time. See *www.adobe.com/go/cslive* for details.

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